

AMENDED CLAIMS WRITTEN IN CLEAN FORM:

1 85. (New) A method for administration of a substance to a mammal, the method comprising injecting the substance into the dermis of the mammal, wherein improved systemic absorption is produced relative to absorption produced upon injecting the substance subcutaneously and wherein the substance is a growth hormone, a low molecular weight heparin or a dopamine receptor agonist.

2 86. (New) The method of claim 85 wherein the substance is a human growth hormone.

3 87. (New) The method of claim 85 wherein the substance is a low molecular weight heparin.

4 88. (New) The method of claim 85 wherein the substance is a dopamine receptor agonist.

5 89. (New) The method of claim 85 wherein the substance is in the form of nanoparticles.

6 90. (New) The method of claim 85 wherein the injecting is through at least one hollow needle, by electroporation, or by thermal poration.

7 91. (New) The method of claim 90 wherein the injecting is through at least one hollow needle.

8 92. (New) The method of claim 91 wherein the at least one hollow needle comprises an array of microneedles.

9 93. (New) The method of claim 85 wherein the substance is administered by bolus injection.

10 94. (New) The method of claim 93 wherein the substance is administered by repeated bolus injections.

11 95. (New) A method for administration of a substance to a mammal, the method comprising selectively injecting the substance into the dermis of the mammal to obtain systemic absorption of the substance from the dermis, wherein the substance is a growth hormone, a low molecular weight heparin or a dopamine receptor agonist.

12 96. (New) The method of claim 95 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

13 97. (New) The method of claim 96 wherein selectively injecting the substance into the dermis is through at least one hollow needle having a length and outlet selected for their suitability for delivering the substance into the dermis to obtain systemic absorption of the substance from the dermis.

14 98. (New) The method of claim 95 wherein the substance is a human growth hormone.

15 99. (New) The method of claim 95 wherein the substance is a low molecular weight heparin.

16 100. (New) The method of claim 95 wherein the substance is a dopamine receptor agonist.

17 101. (New) The method of claim 95 wherein the substance is in the form of nanoparticles.

18 102. (New) The method of Claim 97 wherein the at least one hollow needle comprises an array of microneedles.

19 103. (New) The method of claim 95 wherein the substance is selectively injected into the dermis to obtain improved systemic absorption compared to absorption produced upon subcutaneous administration of the substance.

20 104. (New) The method of claim 95 wherein the substance is administered by bolus injection.

21 105. (New) The method of claim 104 wherein the substance is administered by repeated bolus injections.

22 106. (New) A method for administration of a substance to a mammal, the method comprising selectively injecting the substance into the dermis of the mammal, wherein systemic absorption of the substance from the dermis is produced, and wherein the substance is a growth hormone, a low molecular weight heparin or a dopamine receptor agonist.

23 107. (New) The method of claim 106 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

24 108. (New) The method of claim 107 wherein the method comprises selectively injecting the substance into the dermis through at least one hollow needle having a length and outlet selected for their suitability for delivering the substance into the dermis.

25 109. (New) The method of claim 106 wherein the substance is a human growth hormone.

26 110. (New) The method of claim 106 wherein the substance is a low molecular weight heparin.

27 111. (New) The method of claim 106 wherein the substance is a dopamine receptor agonist.

28 112. (New) The method of claim 106 wherein the substance is in the form of nanoparticles.

29 113. (New) The method of claim 107 wherein the at least one hollow needle comprises an array of microneedles.

30 114. (New) The method of claim 106 wherein absorption of the substance in the dermis produces improved systemic absorption compared to absorption produced upon subcutaneous administration of the substance.

31 115. (New) The method of claim 106 wherein the substance is administered by bolus injection.

32 116. (New) The method of claim 115 wherein the substance is administered by repeated bolus injections.

33 117. (New) A device for administering to a mammal, a composition which comprises a growth hormone, a low molecular weight heparin or a dopamine receptor agonist, the device being configured to selectively deliver the composition into the dermis to obtain systemic absorption of the composition, wherein the device is an electroporation injection system or a thermal poration injection system.

34 118. (New) A device for administering to a mammal, a composition which comprises a growth hormone, a low molecular weight heparin or a

dopamine receptor agonist, the device being configured to selectively deliver the composition into the dermis, wherein systemic absorption of the composition is obtained, and wherein the device is an electroporation injection system or a thermal poration injection system.

35 119. (New) A method for administering a substance to a mammal, the method comprising selectively delivering the substance to the dermis to achieve improved systemic absorption as compared to systemic absorption produced upon bolus subcutaneous administration of the substance at an identical dose, wherein the substance is a growth hormone, a low molecular weight heparin or a dopamine receptor agonist.

36 120. (New) The method of claim 119 wherein the substance is a human growth hormone.

37 121. (New) The method of claim 119 wherein the substance is a low molecular weight heparin.

38 122. (New) The method of claim 119 wherein the substance is a dopamine receptor agonist.

39 123. (New) The method of claim 119 wherein the substance is in the form of nanoparticles.

40 124. (New) The method of claim 119 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

41 125. (New) The method of claim 124 wherein the delivering is through at least one hollow needle.

42 126. (New) The method of claim 125 wherein the at least one hollow needle comprises an array of microneedles.

43 127. (New) The method of claim 125 wherein the substance is administered by bolus injection.

44 128. (New) The method of claim 127 wherein the substance is administered by repeated bolus injections.

45 129. (New) A method for administering a substance to a mammal, the method comprising selectively delivering the substance to the dermis, wherein improved systemic absorption is produced as compared to systemic absorption produced upon bolus subcutaneous administration of the substance at an identical dose, and wherein the substance is a growth hormone, a low molecular weight heparin or a dopamine receptor agonist.

46 130. (New) The method of claim 129 wherein the substance is a human growth hormone.

47 131. (New) The method of claim 129 wherein the substance is a low molecular weight heparin.

48 132. (New) The method of claim 129 wherein the substance is a dopamine receptor agonist.

49 133. (New) The method of claim 129 wherein the substance is in the form of nanoparticles.

50 134. (New) The method of claim 129 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

51 135. (New) The method of claim 129 wherein the delivering is through at least one hollow needle.

52 136. (New) The method of claim 135 wherein the at least one hollow needle comprises an array of microneedles.

53 137. (New) The method of claim 129 wherein the substance is administered by bolus injection.

54 138. (New) The method of claim 137 wherein the substance is administered by repeated bolus injections.